

AEA RPSU Generator Inventory Fund Closeout Summary

Background:

The Alaska Energy Authority, Rural Power System Upgrade Program, requested and received funding for the pre-construction purchase of several diesel generator sets for powerhouses in the Final Design stage. The generators were all of a specific configuration preferred by the Authority for their suitability for remote applications, especially the fuel economy under the typical rural powerhouse load conditions. The gensets were purchased under standard AEA Limited Competition Procurement procedures due to the circumstance of the availability of these specific engines. These particular models were the end of the manufacturer's production run, with no additional units scheduled for construction and were the last units in the manufacturer's inventory.

Activities:

The engine/generator units were purchased under a limited solicitation in order to secure the specific units still in the manufacturer's inventory. Delays in purchasing these final units would have required purchase of lower efficiency models for powerhouses already under design.

Details of the generator distribution are summarized in the following table:

Item Description	Village	Quantity
450 ekW Prime Power Engine Generator Unit	Angoon	1
410 ekW Prime Power Engine Generator Unit	Kipnuk	1
410 ekW Prime Power Engine Generator Units	Kwethluk	2
410 ekW Prime Power Engine Generator Units	Unalakleet	4

Project Outcomes:

The higher efficiency units are being installed in the new powerhouses according to the table above. Village utilities will save thousands of gallons of fuel annually due to the configuration of these engines.

Problems Encountered:

Rigorous procurement procedures were followed in order to make this Limited Competition Solicitation successful.

Conclusions and Recommendations:

Close monitoring of the powerhouse fuel consumption will assure realization of the maximum fuel economy possible from these engines.